AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A titania nanotube having a length of 1 μm or more.

2. (original): The titania nanotube according to Claim 1 the diameter is 0.1 μm or less.

3. (original): The titania nanotube according to Claim 1 or 2 wherein the aspect ratio is 100 or more.

4. (previously presented): A sensor having the titania nanotube according to Claim 1 or 2 and an electrode in which the titania nanotube and the electrode are connected.

5. (currently amended): A method for producing ~~a~~ the titania nanotube of Claim 1, comprising a step of dispersing a titania powder in a sodium hydroxide aqueous solution at a temperature of 60°C or more.

6. (original): The method according to Claim 5 wherein the titania powder has an average particle diameter of 50 nm or less.

7. (original): The method according to Claim 5 or 6 wherein the amount of the titania powder is 0.01 part by weight or more and 0.1 part by weight or less based on 100 parts by weight of a sodium hydroxide aqueous solution.

8. (previously presented): The method according to Claim 5 or 6, wherein the sodium hydroxide aqueous solution has a concentration of sodium hydroxide of 1 M or more and 15 M or less.

9. (original): The method according to Claim 8 wherein the sodium hydroxide aqueous solution has a concentration of sodium hydroxide of 3 M or more and 13 M or less.

10. (original): The method according to Claim 9 wherein the sodium hydroxide aqueous solution has a concentration of sodium hydroxide of 7 M or more and 12 M or less.

11. (previously presented): The method according to Claim 5, wherein dispersion is conducted at 90°C or more and 120°C or less.

12. (previously presented): The method according to Claim 5, wherein dispersion is conducted by stirring or irradiation with an ultrasonics.

13. (original): The method according to Claim 12 wherein dispersion is conducted by stirring.

14. (previously presented): A sensor having the titania nanotube according to Claim 3 and an electrode in which the titania nanotube and the electrode are connected.

15. (previously presented): The method according to Claim 7, wherein the sodium hydroxide aqueous solution has a concentration of sodium hydroxide of 1 M or more and 15 M or less.